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February 6, 2017

**Response to Public Notice – Comment Sought on Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies
Mobilitie, LLC, Petition for Declaratory Ruling
WT Docket No. 16-421**

The Utah Department of Transportation (“UDOT”) is submitting comments concerning Mobilitie’s Petition for Declaratory Ruling. Although the Public Notice references comments towards the local governments, UDOT is submitting comments from a state perspective.

The primary function of the state highways is to provide for the safe and efficient movement of traffic. Utah Code §72-4-102.5(2)(c). In addition, a state highway shall primarily move higher traffic volumes over longer distances than highways under local jurisdiction. Utah Code §72-4-102(3)(b). The state highways general involve higher speed highways than local government highways. Although UDOT does accommodate utilities, the primary purpose of the state right-of-way is to maximize the public use of the right-of-way for transportation purposes and to ensure that utility installations and operations affecting the state right-of-way are installed and accessed in compliance with

state and federal law.¹ The permitted use and occupancy of right-of-way for non-highway purposes is subordinate to the primary and highest interest for transportation and safety of the traveling public.² With the interstate highways and federal-aid projects, the Federal Highway Administration's ("FHWA") rules concerning highways apply.

UDOT does accommodate telecommunication facilities within the right-of-way.³ For non-interstate or limited access highways, UDOT does not charge a lease fee for utility companies that provide a service to the public. Only the actual costs for processing a permit and inspections fees are charged. Most telecommunication facilities are fiber lines within a conduit that are located underground. This use does not conflict with the highway use. UDOT does not allow any utility facilities to be placed on the light signal poles due to safety concerns. Telecommunication pole towers installations that are 45 to 120 feet create conflicts with the transportation use of the highway because of safety issues.

UDOT has a policy to provide clear zones to increase safety and improve traffic operations. In the clear zone, UDOT does not allow the installation of utility poles and

¹ "Pursuant to the provisions of 23 CFR 1.23, it is in the public interest for utility facilities to be accommodated within the right-of-way of Federal-aid or direct Federal highway project when such use and occupancy of highway right-of-way do not adversely affect highway or traffic safety, or otherwise impair the highway or its aesthetic quality, and do not conflict with the provisions of Federal, State, or local laws or regulations." 23 CFR §645.205(a).

² "The manner in which utilities cross or otherwise occupy the right-of-way of a direct Federal or Federal-aid highway project can materially affect the highway, its safe operation, aesthetic quality, and maintenance. Therefore, it is necessary that such occupancy, where authorized, be regulated by transportation departments in a manner which preserves the operational safety and the functional operational safety and the functional and aesthetic quality of the highway facility. This subpart shall be construed to alter the basic legal authority of utilities to install their facilities on public highways pursuant to law or franchise and reasonable regulation by transportation departments with respect to location and manner of installation." 23 CFR §645.205(c).

³ Within city limits, UDOT does not control the right-of-way behind back of curb.

other ground mounted structures. Reducing hazards include placing utility facilities that are above ground at locations which protect out-of-control vehicles, using breakaway features, using impact attenuation devices, or shielding. Even with the mitigation devices, the pole towers are problematic.

The clear zone is the entire roadside border area starting at the edge of the traveled way, available for the safe use by errant vehicles. This area may consist of a shoulder, recoverable slope, a non-recoverable slope, and the area at the toe of the recoverable slope. The actual width is dependent upon traffic volumes and speeds, and roadside geometry.⁴ See Exhibit A for the summary for *A Guide for Reducing Collisions Involving Utility Poles*. The plan shall determine the effects of the utility installations and traffic safety.

UDOT acquires all interest for access, air, light, and view for interstate highways. For interstate highways, no installation of utility facilities will be allowed if they adversely affect public safety.⁵ Furthermore, UDOT is allowed to adopt a more restrictive policy concerning a longitudinal utility installation along the freeway right-of-way.⁶ Longitudinal telecommunication access is allowed according to Utah Code §72-7-108. However, UDOT is obligated to charge compensation from the telecommunications facility provider for the use of the right-of-way. UDOT has adopted the schedule of fees for interstate highway in Utah Administrative Code R907-65. See Exhibit B. UDOT's statute and rule complies with the freeway accommodation policy as stated in the FHWA Program Guide – Utility Relocation and Accommodation on Federal-Aid Highway Projects. See Exhibit C. Other telecommunication companies are paying the fees.

⁴ 23 CFR §645.207

⁵ 23 CFR §645.209(a)(2)(ii)

⁶ 23 CFR §645.209(a)(3)

In regard to fees for permits, a highway authority may only recover management costs the utility service provider causes by being within the right-of-way. The fee or other compensation must be on a competitively neutral basis. A highway authority may not use the compensation authority as a means to generate revenue for the highway authority in addition to the management costs. Utah Code §72-7-102(4). Mobilitie's assertions concerning overcharging by state and local governments are incorrect in the State of Utah.

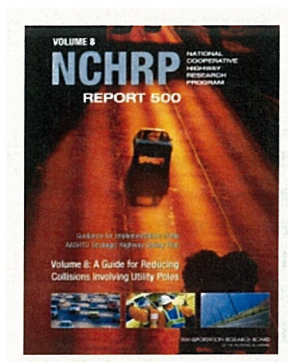
UDOT will charge the industry standard of 5 to 10% of the land value for leases of property that are not being used as right-of-way. The value is determined by appraisals whether ordering one for that specific site or based upon other recent appraisals of property in the area. Because of the number of highway construction projects, UDOT orders numerous appraisals. This approach is used for all persons or entities who want to lease UDOT property. At the time of the lease, the value should be determined based upon appraisals. Other telecommunication companies either lease private property or UDOT property for the cell tower sites. Mobilitie is unique in its attempt to install pole towers (transport or mini-macro poles) within public right-of-way. Conventional cell tower sites are less likely to be impacted by highway construction projects, which will cause less disruption to the telecommunications facilities and service to the public.

In addition, the Utah Public Service Commission ("PSC") has approved rates for the utility attachment agreements between Rocky Mountain Power and any utility that desires to attach to the power poles. The terms are standard unless the PSC approves the term change. Currently, Mobilitie has a signed pole agreement with Rocky Mountain Power. Unfortunately, this document could not be attached because the document is

protected at Mobilitie's request. The PSC ensures that same rates apply to all utility companies.

UDOT requests that the FCC deny Mobilitie's petition because Mobilitie is not being overcharged for fees to access the local government right-of-way and UDOT has the authority to deny installations for safety reasons. Furthermore, UDOT is allowed to charge market value based upon appraisals for the use of the interstate highway right-of-way.

EXHIBIT A



A Guide for Reducing Collisions Involving Utility Poles

DETAILS

65 pages | | PAPERBACK

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AUTHORS

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Summary

Introduction

The AASHTO Strategic Highway Safety Plan identified 22 goals to be pursued to achieve a significant reduction in highway crash fatalities. One of the hallmarks of the plan is to approach safety problems in a comprehensive manner. The range of strategies available in the guides will ultimately cover various aspects of the road user, the highway, the vehicle, the environment, and the management system. The guides strongly encourage the user to develop a program to tackle a particular emphasis area from each of these perspectives in a coordinated manner.

AASHTO's overall goal is to move away from independent activities of engineers, law enforcement, educators, judges, and other highway safety specialists and to move to coordinated efforts. The implementation process outlined in the series of guides promotes the formation of working groups and alliances that represent all of the elements of the safety system. In so doing, the guides can draw upon their combined expertise to reach the bottom-line goal of targeted reduction of crashes and fatalities associated with a particular emphasis area.

This emphasis area is specifically identified in Goal 16, *Minimizing the Consequences of Leaving the Road*. Utility pole crashes are a subset of run-off-road (ROR) crashes. Emphasis Area 16.1 addresses the general subject of ROR crashes and covers strategies aimed at reducing the consequences of ROR crashes by (1) keeping vehicles from leaving the roadway and (2) reducing the severity of impacts after leaving the roadway. Ideally, keeping the vehicle on the roadway and in its appropriate lane is preferred. The reader should refer to the other strategy documents for strategies aimed at keeping the vehicle on the roadway. This guide focuses on measures directed at reducing the harm in utility pole crashes after encroachment on the roadside has occurred—strategies such as removing or relocating specific utility poles, placing utilities underground, and shielding motorists from utility poles.

Utility pole crashes are fixed-object crashes that involve vehicles leaving the travel lane, encroaching on the roadside, and striking a utility pole.

Utility poles can also contribute to the severity of other crash types. Many crashes are not classified as ROR or fixed-object crashes where one or more vehicles strike a utility pole. Crashes are often classified by “first harmful event.” In some cases, striking the utility pole is a secondary event that may be as severe as, or more severe than, the first harmful event. Crashes involving utility poles as secondary events easily go unnoticed when examining the total magnitude of the utility pole crash problem.

are impractical, this approach includes strategies that redirect errant vehicles, lessen the severity of impacts, or alter the operating conditions to create less severe impact conditions.

Exhibit I-2 lists the objectives and several related strategies for reducing the consequences and frequency of utility pole crashes. This exhibit does not represent a listing of all possible strategies to reduce the frequency and severity of utility pole crashes. For example, many strategies that focus on keeping vehicles on the roadway are not listed, but they would be very effective in reducing utility pole crashes. The reader may refer to the guides that specifically address the ROR crash issue for details on these strategies.

EXHIBIT I-2
Emphasis Area Objectives and Strategies

Objectives	Strategies
16.2 A Treat specific utility poles in high-crash and high-risk spot locations.	16.2 A1 Remove poles in hazardous locations. 16.2 A2 Relocate poles in hazardous locations further from the roadway or to a less vulnerable location. 16.2 A3 Use breakaway poles. 16.2 A4 Shield drivers from poles in hazardous locations. 16.2 A5 Improve the drivers' ability to see poles in hazardous locations. 16.2 A6 Apply traffic calming measures to reduce speeds on high-risk sections.
16.2 B Prevent placing utility poles in high-risk locations.	16.2 B1 Develop, revise, and implement policies to prevent placing or replacing poles within the recovery area.
16.2 C Treat several utility poles along a corridor to minimize the likelihood of crashing into a utility pole if a vehicle runs off the road.	16.2 C1 Place utilities underground. 16.2 C2 Relocate poles along the corridor farther from the roadway and/or to less vulnerable locations. 16.2 C3 Decrease the number of poles along the corridor.

Target of the Objectives

The first objective addresses the locations that have a collision history or are recognized as high-risk locations. The application of these strategies is generally limited to a single pole or a few poles. For example, one pole on the outside of a horizontal curve can be moved to a less exposed location on the inside of the same curve. The target of the second objective is placing new utility poles along the roadway or relocating poles for 3R projects or other roadway projects, including widening. In addition, the second objective targets poles that will be replaced when utility companies periodically reconstruct their facilities. The third objective targets utility poles along longer sections of roadway where crashes are spread out along the corridor and not clustered around a small number of poles. It is important to mention that cooperation is a joint responsibility between highway agencies and utility companies and is an essential ingredient to promoting utility safety.

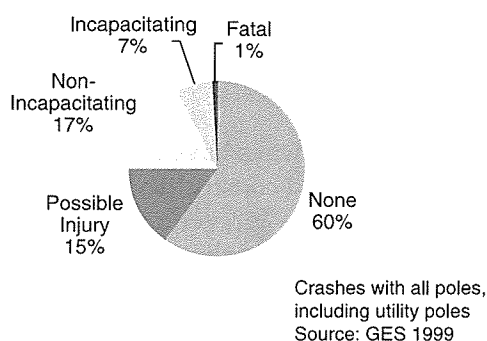
SECTION I—SUMMARY

Type of Problem

Utility poles represent one of the more substantial objects that are intentionally placed on roadsides. “The U.S. has over 88 million utility poles on highway rights-of-way.”¹ They are substantial both in sheer number and in structural strength. The only object type more frequently struck in fatal fixed-object crashes is trees.² Because of the structural strength and small vehicle contact area of utility poles, these crashes tend to be severe.

In 2002, there were 1,008 fatal crashes³ associated with utility poles reported in the Fatality Analysis Reporting System (FARS; see <http://www-fars.nhtsa.dot.gov/>). Although the National Highway Traffic Safety Administration (NHTSA) General Estimates System (GES) does not report utility pole crashes separately, the data for 1999 show that fatal crashes were only about 1 percent of all pole crashes. However, about 40 percent of pole crashes involve some type of injury. The data also show that about 25 percent of pole crashes occur in adverse weather conditions, and only about half occur in full daylight, while another 25 percent occur under lighted conditions at night.

EXHIBIT I-1
Distribution of Maximum Severity for Pole Crashes



Objectives of the Emphasis Area

To reduce the severity and number of fatality utility pole crashes, the objectives should be to

- Treat specific utility poles in high-crash and high-risk spot locations,
- Prevent placing utility poles in high-risk locations, and
- Treat several utility poles along a corridor to minimize the likelihood of crashing into a utility pole if a vehicle runs off the road.

A comprehensive safety program to address utility pole crashes would be missing very important opportunities if non-engineering methods were not also considered. While not

¹“Safer Roadsides Through Better Utility Pole Placement, Protection, Construction,” *Texas Transportation Researcher*, Volume 35, Number 1 (1999).

²American Association of State Highway and Transportation Officials. *Roadside Design Guide*. AASHTO, Washington, D.C. January 1996.

³This number was obtained assuming that the collision with the utility pole was the first harmful event in the fatal crash.

specifically targeting pole crashes, some of these methods, such as increased speed enforcement and increased use of seatbelts, can help reduce the severity and risk of utility pole crashes. These systemic strategies have a much broader reach than utility pole or fixed-object crashes. However, the authors encourage the reader to refer to the guides that specifically address these strategies and to work with the appropriate agencies to apply the strategies.

Explanation of the Objectives

A multifaceted approach is ideal and includes combining the efforts of highway agency and utility personnel, treating existing isolated problem locations and high-risk sites, preventing the development of new high-risk sites, and systematically reviewing and treating high-risk corridors. The time and cost to relocate or remove utility poles sometimes causes the strategy to receive less attention than is appropriate to effectively reduce the severity and impact of utility pole crashes. The lack of attention received by this strategy is a reason to develop a focused and well-documented program to maximize the safety improvements' effectiveness.

The first objective represents an approach to identify and treat locations with a history of utility pole crashes. While many agencies have not kept the necessary data to systematically identify high-risk locations in a proactive approach, other techniques such as safety audits can be used to flag high-risk locations for investigation and possible treatment. Strategies for this objective focus on a relatively small number of poles in high-risk locations that may need a rapid response.

A comprehensive safety program should always have a prevention component. Utility pole crashes are not an exception. The design and construction phases of roadway and utility projects are the best opportunities to practice “preventative medicine” by not placing poles in vulnerable locations. The strategy for meeting this objective is generally a long-term, systemic approach that requires steady and consistent application. The opportunities for application range from initial design of new facilities, 3R (resurfacing, restoration, and rehabilitation) projects, and utility rehabilitation, to even smaller projects where turn lanes are built with private funding, such as by developers.

One of the major hurdles of safety programs targeting utility poles is the sheer number of poles on the roadside. It took decades to “plant” all the poles on the roadside. Utility poles were along roadsides when horses were drawing carriages. Therefore, it is unrealistic and unnecessary to expect to treat all the poles at the same time. A program is needed with both short-term and long-term components. These components should target and treat both the high-risk poles (such treatment tends to be done in the short term) and systematically treat poles along corridors on a continuing basis. This two-pronged approach helps avoid overwhelming agencies, utility companies, or other potential stakeholders. This approach recognizes that it is not financially possible to fix all the potentially hazardous poles immediately. Nevertheless, organized and targeted strategies to treat roadsides over time can significantly reduce the likelihood of a vehicle striking a utility pole or of that event causing injuries.

Often, it is not feasible to remove, relocate, or place underground the utilities carried by potentially hazardous roadside poles. However, it may be possible to lessen the severity of injuries involved in crashes where a vehicle does strike such a pole. When other objectives

EXHIBIT B

R907. Transportation, Administration.

R907-65. Compensation Schedule for Longitudinal Access to Interstate Highway Rights-of-Way for Installation of Telecommunications Facilities.

R907-65-1. Purpose.

The purpose of this rule is to implement a compensation schedule for longitudinal access to the rights-of-way of the interstate system for installation and operation of telecommunications facilities. This Rule establishes the methodology and schedules for charging compensation in accordance with Subsection 72-7-108(3)(b). Subsection 72-7-108(3)(b) requires that the compensation be:

- fair and reasonable;
- competitively neutral;
- nondiscriminatory;
- open to public inspection;
- established to promote access by multiple telecommunication facility providers;
- established for zones of the state, with zones determined based upon factors that include population density, distance, numbers of telecommunication subscribers, and the impact upon private right-of-way users;
- established to encourage the deployment of digital infrastructure within the state.

R907-65-2. Authority.

Subsection 72-7-108(3)(c) states that the department shall establish a schedule of rates of compensation for longitudinal access granted under that section, and shall do so beginning October 1, 1999, and in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act.

R907-65-3. Background.

The department has conducted an analysis of right-of-way values for the interstate system using current market data on (1) Utah real property values differentiated by location (northern Utah (Salt Lake City/surrounding counties), central Utah (Provo/surrounding counties), and southern Utah (Cedar City/St. George/surrounding counties), population density (urban, rural) and land use (residential, commercial, industrial, agriculture) and (2) appraisal values from department land acquisitions. These data were applied to fifteen right-of-way segments of the interstate system that the department defined based on various factors, including but not limited to location, similarity of land use, population density and number of telecommunications subscribers. Segment land values were then calculated based on the relevant "across-the-fence" property values and the following core assumptions:

Land needed for longitudinal installations of telecommunications facilities, including a buffer zone, will generally be 6 feet in width.

Values for preassembled right-of-way for longitudinal access are 200% of values for non-assembled right-of-way.

Values for underground use of right-of-way for longitudinal access are 50% of values for ground level and aboveground use.

Upper and lower bound real property values establish a valuation range for each segment. Point estimates of segment land values are

calculated at the 30th percentile within this range.

Segment land values (reported in \$/ft²) are converted to \$/mile using the following formula:

Segment land value (\$/mile) = Segment land value (\$/ft²) x 5,280 ft/mile x easement width (6 ft).

The fifteen segments were then grouped into five zones based on similarities in segment attributes and values. For example, the rural segments of I-15, I-70 and I-84 were grouped to create zone 1, while the urban segment of I-15 traversing Salt Lake City was grouped with I-215 to create zone 5. Similar groupings make up zones 2, 3 and 4. Through this process, the department defined five zones with a weighted average land value for each zone.

The department then determined annual lease valuation, as a rate of return on the land values for each zone, using current market data.

The department determined that a 10% annual rate of return on investment represents a fair and reasonable compensation rate in current market conditions.

The department also received and considered recommendations on rates of compensation from the Utility in Highway Rights-of-Way Task Force pursuant to Section 6(2)(a) of S. B. 150.

R907-65-4. Definitions.

The definitions of terms in R907-64-3 apply to the same terms used in this Rule. This Rule uses the following additional defined terms:

(1) "Land value" means the fair market value of land within the right-of-way of the interstate system as determined by the department under the core assumptions set forth in R907-65-3 and established for compensation purposes under R907-65-6.

(2) "Rate of return" means the annual rate of return on investment, using land value, as determined by the department and established for compensation purposes under R907-65-7.

(3) "Zone" means a group of right-of-way segments of the interstate system as determined by the department and established for compensation purposes under R907-65-5.

R907-65-5. Compensation Zones.

(1) Five zones of the State are established for purposes of determining land values and compensation rates for longitudinal access to the right-of-way of the interstate system.

(2) The five zones are:

Zone 1 - Segments traversing primarily rural, agricultural areas with low population density. The two primary segments in this zone are located south of Provo, extending to Arizona along I-15 and to Colorado along I-70. This zone also includes shorter segments of I-80 and I-84 bounded by the Wyoming and Nevada State lines respectively. Approximately 90% of this zone borders agricultural land.

Zone 2 - Segments traversing primarily sub-rural areas with low population density. Segments in this zone are located in the north-central, north-eastern and north-western regions of the State.

Land usage is primarily agricultural (approximately 75%), with light pockets of industrial, commercial, and residential land usage.

Zone 3 - Segments traversing sub-rural/suburban land around the

State's metropolitan areas with medium population density. Segments in this zone are located outside the Salt Lake City metropolitan area.

Land usage is mixed; while agriculture still makes up the largest proportion of land usage, about one-third of the land is residential, and slightly less than one-third is commercial and industrial.

Zone 4 - Segments traversing suburban/urban areas with medium/high population density. Segments in this zone run on a north-south route on I-15 through the Salt Lake City metropolitan area. Land usage in this zone is mixed, with the greatest proportion categorized as industrial, followed by residential, then commercial, and small pockets of agricultural usage.

Zone 5 - Segments traversing the densely populated urban areas. Segments in this zone are located in and around Salt Lake City. Nearly half is categorized as residential, and the rest is split between industrial and commercial usage, with very small pockets of agricultural usage.

(3) The existing right-of-way of the interstate system is placed into the five zones as set forth in Table 1. Whenever new right-of-way is added to the interstate system, the department shall modify Table 1 to classify the new right-of-way into the applicable zone or zones and publish the modified Table 1.

(4) At least once every five years the department shall conduct an analysis to determine changes, if any, in the boundaries of zones based on demographic and market data, including but not limited to data on similarity of surrounding land uses, population density, distances and number of telecommunications subscribers. The department shall publish a modification to Table 1 whenever zone boundaries are changed.

TABLE 1
Compensation Zones

Zone/Segment	Reference Post (from -- to)	Mileage
Zone 1		575
I-15: Payson South Int. to Arizona	252 -- 0	252
I-84: Tremonton to Idaho	43 -- 0	43
I-80: Wyoming to Silver Creek Int.	198 -- 148	50
I-70: Entire Route	0 -- 230	230
Zone 2		212
I-15: Idaho to Weber-Box Elder Co. Line	404 -- 354	50
I-15: Springville Int. to Payson South Int.	263 -- 252	11
I-84: Echo to SR-89	120 -- 88	32
I-84: SR-89 to I-15	88 -- 81	7
I-80: Magna Int. to Nevada	112 -- 0	112
Zone 3		50
I-15: Weber-Box Elder Co. Line to Parish Lane Int.	354 -- 323	31
I-80: Silver Creek Int. to Mouth		

of Parley's Canyon	148 -- 129	19
Zone 4		60
I-15: Parish Lane Int. to Salt Lake-Utah Co. Line	323 -- 288	35
I-15: Salt Lake-Utah Co. Line to Springville Int.	288 -- 263	25
Zone 5		47
I-80: Mouth of Parley's Canyon to Magna Int.	129 -- 112	17
I-215: Entire Route	0 -- 30	30

R907-65-6. Land Values.

(1) Land values for longitudinal access for telecommunications facilities are established, by zone, as set forth in Table 2. Whenever new right-of-way is added to the interstate system and a zone or zones are established for such new right-of-way under R907-65-5(3), the land value for such zone or zones set forth in Table 2 shall apply to such new right-of-way.

(2) At least once every five years, the department shall conduct a market analysis to determine the fair and reasonable values of the right-of-way of the interstate system for longitudinal access for telecommunications facilities. The department shall determine this value for each zone. The department shall publish a modification to Table 2 whenever the department completes a market analysis and determines that values of the right-of-way have changed.

(3) In determining land values, the department shall disregard any circumstance in which the department's interstate right-of-way is the only viable alternative for installing and operating telecommunications facilities between relevant geographic markets.

The department shall adjust such values to those which would exist if another viable alternative existed for installing and operating comparable telecommunications facilities such that the department would not possess monopolistic market power in the subject location.

TABLE 2

Land Values (\$/mile)

Zone	Miles in Zone	Weighted Average Land Value
Zone 1	575	\$8,000
Zone 2	212	\$22,000
Zone 3	50	\$48,000
Zone 4	60	\$80,000
Zone 5	47	\$124,000

R907-65-7. Rate of Return.

(1) An annual rate of return on land value of 10% is established for purposes of determining annual compensation rates for longitudinal access to the right-of-way of the interstate system.

(2) At least once every five years the department shall conduct an analysis to determine changes, if any, in the rate of return based

on market data. The department shall publish a modification to the rate of return whenever the department completes a market analysis and determines that market rate of return has changed.

R907-65-8. Base Compensation Schedule.

(1) The department shall charge compensation for longitudinal access for telecommunications facilities so that the department receives, on an annual basis, the rate of return on the value of land in each zone established under this Rule which is utilized for overhead, surface or underground installations of telecommunications facilities, subject to adjustment under R907-65-10 and potential discount under R907-65-11.

(2) The compensation charged shall be set forth in the agreement between the department and the telecommunications facility provider pursuant to R907-64.

(3) The annual compensation to be paid by each telecommunications facility provider which enters into an agreement with the department for longitudinal access shall be determined under the following formulas:

Land values by zone are translated into annual compensation rates (\$/mile) using the following formula:

Annual compensation rate per zone (\$/mile) = zonal land value (\$/mile) (from Table 2) x rate of return (currently 10%)

Total annual compensation shall then be calculated as follows:

Total annual compensation per zone = annual compensation rate per zone (\$/mile) x # of miles accessed.

For telecommunications facility providers seeking a route that accesses multiple zones, the above calculations shall be made for each zone then summed to calculate total annual compensation for the requested access route.

R907-65-9. Compensation for Use of Department Conduit.

(1) The land values set forth in Table 2 (and therefore the annual base compensation amounts) do not include the value of any spare conduit which the department owns. The department is authorized to offer use of and access to its spare conduit to telecommunications facility providers, provided the department determines the spare conduit is not and will not be needed for highway purposes and the department receives additional compensation for the use of and access to the spare conduit.

(2) Such additional compensation shall be fair and reasonable to the department and the telecommunications facility provider and shall be charged in a competitively neutral and nondiscriminatory manner to all similarly situated telecommunications facility providers. The department shall establish the amount of compensation for use of and access to the department's spare conduit by zone.

(3) Such additional compensation shall be subject to adjustment annually in the same manner as provided in R907-65-10.

(4) At least once every five years the department shall conduct an analysis to determine changes, if any, in the value of its spare conduit. Whenever the department completes a market analysis and determines that value of its spare conduit has changed, the department shall apply its new values to each agreement thereafter executed by the department.

R907-65-10. Adjustments to Base Compensation Schedule for Annual Payments.

(1) The base compensation schedule for each calendar year after a year in which the department determines land values under R907-65-6 shall be adjusted effective January 1 of each such calendar year (each an "adjustment date"). The adjustment shall be calculated by multiplying the base compensation amount for the immediately preceding calendar year by a fraction. The numerator of the fraction shall be the "All Items, Consumer Price Index for All Urban Consumers (CPI-U) for the West (1982-84=100)," reported by the U.S. Department of Labor, Bureau of Labor and Statistics (BLS), published for the month of September immediately preceding the adjustment date in question. The denominator of the fraction shall be such index published for the next preceding month of September. The adjustment may result in an increase or decrease in the base compensation schedule.

(2) If the methodology for determining the index is changed by the issuer of the index, the department shall convert the index in accordance with the conversion factor published by the issuer of the index. If the index is discontinued or changed so that it is not practical to obtain a continuous measurement of price changes, the department shall replace the index with a comparable governmental index and apply the index chosen to all agreements which require annual adjustment to the base compensation.

(3) Except as provided in R907-65-11, each agreement for longitudinal access to the right-of-way of the interstate system with telecommunications facilities providers shall require that the rates of compensation during the first calendar year of the term of the agreement equal the base compensation schedule determined for that calendar year under this Rule (prorated if the term begins after January 1), taking into account any adjustments under R907-65-10(1).

(4) Except as provided in R907-65-11, each agreement for longitudinal access to the right-of-way of the interstate system with telecommunications facilities providers shall require an adjustment in the annual base compensation effective January 1 of each subsequent calendar year of the term (prorated for the last year of the term if it ends before December 31). The adjustment shall be calculated by multiplying the base compensation amount for the immediately preceding calendar year (annualized for partial calendar years during the term) by the fraction described in R907-65-10(1).

(5) It is the intent of this Rule that revisions to the base compensation schedule resulting from re-analysis of market conditions by the department pursuant to R907-65-5(4), R907-65-6(3), R907-65-7(2) and R907-65-9(4) shall apply only to agreements executed after the department completes and issues its revisions, and shall not apply to agreements executed prior to the revision. It also is the intent of this Rule that annual adjustments to the base compensation schedule due to inflation or deflation pursuant to R907-65-10(1) shall apply to every agreement under which annual compensation payments are required.

R907-65-11. Compensation Prior to Construction of Telecommunications Facilities.

(1) The department may charge compensation for the period of

time between execution of the agreement and completion of construction at rates which are discounted from the full annual compensation rates determined under R907-65-8, R907-65-9 and R907-65-10 including no compensation prior to commencement of construction. The department also may agree to the phasing of projects into clearly identified phases, with the compensation schedule structured based on the construction commencement and/or completion dates for each phase.

(2) If the department elects to discount compensation rates, it shall do so in a competitively neutral and nondiscriminatory manner for all similarly situated telecommunication facility providers.

R907-65-12. Lump Sum Monetary Compensation.

(1) The department is authorized to enter into agreements for longitudinal access to the right-of-way of the interstate system with telecommunications facility providers which offer, in lieu of annual compensation, one or more lump sum payments of monetary compensation.

The agreement shall set forth the lump sum payment or payments due.

(2) Lump sum payments shall be calculated to be equivalent, on a present value basis, to annual compensation payments which would be required under R907-65-8, R907-65-9, R-907-65-10 and R907-65-11 over the same time period as that covered by each lump sum payment.

(3) For purposes of determining lump sum monetary compensation for longitudinal access to the right-of-way of the interstate system, the department shall use a discount rate equal to the yield (in percent per annum) on Moody's seasoned Aaa Corporate Bonds, as reported by the Federal Reserve Board through the Federal Reserve Statistical Release. The yield on Moody's Aaa Corporate Bonds reported for the first full month immediately prior to the date an agreement for lump sum monetary compensation is executed by the department shall be the discount rate applied for purposes of determining the amount of such lump sum monetary compensation.

(4) Each telecommunications facility provider which is to pay monetary compensation shall have the right to choose whether to pay it in one lump sum determined according to this Rule R907-65-12 or to pay it in annual installments. Unless the department otherwise agrees in writing, this choice shall be made before the agreement is signed, and the agreement shall set forth the choice made.

R907-65-13. In-Kind Compensation.

(1) The department is authorized to enter into agreements for longitudinal access to the right-of-way of the interstate system with telecommunications facility providers which offer, in lieu of or in addition to monetary compensation, in-kind compensation. In-kind compensation may include, without limitation, delivery to the department for its own uses and purposes of conduit, innerduct, dark fiber, access points, telecommunications equipment, telecommunications services, bandwidth and other telecommunications facilities. The agreement shall set forth the in-kind compensation.

(2) The department shall determine the present value of the in-kind compensation according to the methods set forth in R907-65-12.

The department shall prepare an analysis setting forth its valuation at or before the time it executes the agreement. The valuation analysis need not be included in the agreement.

(3) The department shall value the in-kind compensation as

follows:

(a) Facilities for Department Use Only. Electronic equipment, conduit, fiber and other telecommunications hardware and software contributed to the department shall be valued on a present value basis at the estimated, reasonable cost to the telecommunications facility provider of procuring and installing the same.

(b) Joint Trenching. The present value of the estimated, reasonable cost to the telecommunications facility provider of joint trenching for placing conduit, fiber and other facilities of both the provider (and its customers) and the department shall be proportionately allocated to the department as a component of the present value of the in-kind compensation. The proportion allocated to the department shall equal the total estimated, reasonable cost of the trenching work multiplied by a fraction. The numerator of the fraction shall equal the amount of conduit and innerduct space to be contributed to the department under the agreement. The denominator of the fraction shall equal the total amount of conduit space the telecommunications facility provider is authorized to install under the agreement. Single duct conduit space shall be measured using the planned diameter of the conduit. Multi-duct conduit space shall be measured by summing the planned diameters of each innerduct in the conduit.

(c) Other Jointly Used Facilities. The present value of the estimated, reasonable cost to the telecommunications facility provider of providing any other telecommunications facility which is shared jointly by the provider and the department shall be proportionately allocated to the department as a component of the present value of the in-kind compensation. The department shall determine the proportion to be allocated to the department based on the percentage of use or benefit to which each party will be entitled under the agreement.

(d) Warranties; Maintenance and Operating Covenants. The department shall determine the present value of equipment warranties, warranties of conduit, fiber or other components, software warranties, maintenance covenants and operating covenants based on the reasonable, estimated cost of purchasing such warranties, maintenance and operating contracts from manufacturers or other third parties (if not already included in the cost to purchase the equipment, conduit, fiber, other components or software).

(e) Summation of In-Kind Values. The total present value of the in-kind compensation shall be the sum of the present values determined under subsections (a) through (d) above.

(4) The department shall require annual or lump sum monetary compensation (determined according to the methods set forth in R907-65-12), in addition to the in-kind compensation, if the present value of the in-kind compensation is less than the present value of the annual monetary compensation the department would require over the term of the agreement under R907-65-8, R907-65-9, R907-65-10 and R907-65-11. The amount of the annual or lump sum monetary compensation shall be the difference in such present values.

(5) The department may accept in-kind compensation with a present value in excess of the present value of annual monetary compensation payments which would be required under R907-65-8, R907-65-9, R907-65-10 and R907-65-11 if the telecommunications

facility provider consents in writing and gives a written waiver and release of all claims and protections arising under federal or Utah law by reason of such excess value. The waiver and release shall be in form approved by the director.

(6) Before entering into an in-kind compensation agreement, the department shall obtain from the telecommunications facility provider its valuations of the in-kind compensation. The telecommunications facility provider may provide the department information on its costs in order to assist the department in determining in-kind compensation value. The department shall reasonably consider such valuation and cost information in making its determination, but is not bound by the valuation or cost information submitted.

R907-65-14. Multiple Providers in Same Trench.

(1) If the department enters into an agreement with two or more telecommunications facility providers, or with a consortium or other entity whose members, partners, venturers or other participants are two or more telecommunications facility providers, or if the department requires two or more telecommunications facility providers to share a single trench, then the agreement(s) shall require that the telecommunications facility providers share the burden of the compensation owing to the department under the agreement(s) on a fair, reasonable and equitable basis, taking into consideration the proportionate uses and benefits to be derived by each telecommunications facility provider from the trench, conduits and other telecommunications facilities to be installed under the agreement(s).

(2) The foregoing does not limit the right of the department to require all the participating telecommunications facility providers to bear joint and several liability for the obligations owing to the department under the agreement(s).

(3) Any agreement which requires sharing of the burden of compensation owing to the department shall provide the department the right to review and audit the books, records and contracts of or among the participating telecommunications facility providers to determine compliance or lack of compliance with R907-65-14(1).

KEY: right-of-way, interstate highway system

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EXHIBIT C

Highway officials also recognized that control of access could be materially affected by the extent and manner in which utilities were permitted to cross or otherwise occupy the right-of-way of Interstate highways. It was agreed that in order to be able to effectively carry out the intent of the highway legislation, a uniform national policy should be developed to establish the conditions under which publicly and privately owned utilities could be accommodated on Interstate right-of-way.

Thus, in 1957 AASHTO began the task of establishing such a national policy. In developing this policy, AASHTO arranged several meetings with national utility organizations and groups so that utility industry input could be taken into consideration. Finally, in 1959 AASHTO issued its document, *A Policy on the Accommodation of Utilities on the National System of Interstate and Defense Highways*, and the FHWA accepted the AASHTO policy as a design standard for Interstate highway projects.

The primary objectives of the AASHTO policy were –

- developing and maintaining access control;
- increasing highway safety and function to the maximum; and
- insuring uniformity of utility treatment among the States.

The AASHTO policy recognized the need for utility installations to cross over or under the Interstate right-of-way, as it was not intended for the Interstate to be a barrier to obstruct the development of expanding areas adjacent to the freeway.

Most important, the policy was viewed as strongly discouraging longitudinal utility use of Interstate right-of-way within the access control lines. However, the policy did not establish an outright prohibition of such use, as it was recognized that "extreme case exceptions" might be allowed when the conditions encountered were extraordinary and costly.

Over the years AASHTO reevaluated its position regarding utility use of Interstate right-of-way. The Policy was reissued in 1969 and in 1982 and was expanded to cover all freeway-type facilities. In each instance, the FHWA followed by adopting the AASHTO Policy for use on Federal-aid highways. In both 1969 and 1982 AASHTO reaffirmed the basic principles and policies it had been following in regard to utility use of freeway right-of-way.

The Surface Transportation Assistance Act of 1978, and the technical amendments that later followed, added § 109(l) to 23 U.S.C. This section specifically addressed the issue of utility use of highway right-of-way. It provided that utility use of the right-of-way on Federal-aid highways should not be permitted if such use would "adversely affect safety," and emphasized that highway and traffic safety were of paramount importance when considering the accommodation of utility facilities within highway right-of-way. However, this section also recognized that there could be adverse impacts resulting from not permitting such use, and it required that certain environmental and economic impacts be evaluated and considered in the denial of the use of Federal-aid highway right-of-way for utility facilities. The 1982 AASHTO Policy reflected these concerns and provided for their consideration in the decision-making process.

By the mid-1980s some State authorities and others were questioning the more restrictive provisions of the AASHTO and FHWA policies, particularly regarding longitudinal utility occupancy of freeway right-of-way. Some believed that certain types of utilities could be permitted to longitudinally use freeways with very little adverse impact on the freeway systems.

In consideration of these views and concerns, the FHWA agreed that a more flexible Federal policy position would be appropriate.

Effective February 8, 1988, the FHWA modified its regulations regarding utility installations within freeways (see § 645.209(c)). The revised regulations no longer mandated that the States adhere to the AASHTO Policy. Instead, each State was given the flexibility to adopt its own freeway utility accommodation plan, one that was best suited to its needs and conditions.

In turn, AASHTO revised its policy covering utilities within freeway right-of-way in February 1989. This revised AASHTO policy was generally consistent with the FHWA's regulations in many respects, but continued to prohibit longitudinal utility installations on freeway right-of-way, except in special cases under strictly controlled conditions. For this reason, the FHWA opted not to adopt the AASHTO policy as a Federal standard.

Freeway Accommodation Policies

Prior to the FHWA's regulatory change in February 1988, each State, as part of its overall utility accommodation policy, was required to address transverse utility crossings of freeways and how they were to be controlled. Once a State's policy was approved by the FHWA, the State could then approve individual utility requests for transverse freeway crossings without any further referral to the FHWA provided the crossings satisfied the criteria in their approved policy. For longitudinal utility use of freeways, the States were required to adopt a position at least as restrictive as that in the then current AASHTO Policy. Hence, prior to 1988, the only longitudinal installations allowed on freeways were extreme case exceptions under provisions in the AASHTO Policy, and each individual request had to be approved by the FHWA.

Subsequent to the FHWA's 1988 regulatory change, each State was required to update its utility accommodation policy and include its own policy for permitting utility use of freeways, including longitudinal use if such use was to be allowed.

The States had to decide if they wanted longitudinal utility installations on freeways and if so to what extent and under what conditions. Whatever a State decided to do in this regard had to be documented in its utility accommodation policy and submitted to the FHWA for approval. A State could permit certain utilities and exclude others. And, if a State so chose, it could prohibit any longitudinal utility installations.

All the States are now operating under freeway utility accommodation policies that have been approved by the FHWA. Many States opted to stick with the AASHTO Policy prohibiting longitudinal utility installations, except in special cases under strictly controlled conditions. The States that opted to allow longitudinal installations no longer have to submit individual proposals to the FHWA for approval. It has become their responsibility to assure that proposals are in accord with provisions in their approved utility accommodation policies.

Exceptions to these policies, or changes, must be submitted to the FHWA Division Administrator for approval. In substance, this places all utility freeway installations under the same administrative process that other utility use proposals have been under since the late 1960s.

In summary, FHWA policy for longitudinal utility installations on freeways is as follows:

- The States may decide if they want to allow longitudinal utility installations on freeways and if so to what extent and under what conditions.

- Whatever a State decides to do in this regard must be documented in its utility accommodation policy and approved by the FHWA. Exceptions or changes must be approved by the FHWA Division Administrator.
- A State may permit certain utilities and exclude others. If a State so chooses, it can prohibit any longitudinal utility installations.
- Fees charged for utility use are at a State's discretion and may be used as the State sees fit. The FHWA does, however, encourage States to use generated revenues for transportation purposes.

In approving a State's freeway utility accommodation policy, the FHWA must give careful consideration to measures proposed to insure safety of the traveling public, and features to protect the operation and integrity of the highway. Effects on both the present and future use of the freeway must be considered.

The FHWA recognizes that conditions vary. Highway safety matters are not the same on a low volume rural freeway as on a high volume urban one. Considerable latitude may be appropriate on these rural facilities. The nature and type of utility facilities may also differ from area to area. All these variables must be taken into account. It is noted that there is no such thing as an absolutely safe utility installation. The construction, operation and maintenance of any utility on or near a major high speed highway cannot be done without some risk. Judgment must be exercised by highway authorities in determining if the risks are acceptable and whether all reasonable measures have been taken to maximize the safety of the traveling public.

The FHWA regulation presented in § 645.209(c)(2)(v) includes a few details governing specific criteria a State's utility freeway accommodation policy should contain if it plans to allow longitudinal utility use within the access control lines. These are:

- A utility strip should be established along the outer edge of the right-of-way.
- Existing fences should be retained and, except along section of freeways having frontage roads, planned fences should be located at the freeway right-of-way line.
- The State or political subdivision should retain control of the utility strip, including its use by utility facilities.
- Service connections to adjacent properties to provide services to utility consumers should not be permitted from within the utility strip.

Median Installations

Federal regulations indicate that a utility strip should be established along the outer edge of the right-of-way. The FHWA has interpreted this to mean that longitudinal utility installations as a general rule should not be allowed within the median area of a freeway. There may, however, be some exceptional circumstances where utility facilities could be safely accommodated in the median. For example, for very wide medians where a utility could be installed well beyond the clear zone of the roadways and where access to the site is from crossroads, a case could well be made that there is minimal impact on the highway and its safe operation.

Another example might involve the installation of fiber optics needed for ITS purposes. In situations where it is not technically feasible or is unreasonably costly and there are no feasible alternate locations, it may be argued that the risk involved constructing, operating, and

maintaining a fiber optic installation will be more than offset by the benefits derived by ITS and other systems that the fiber optic facilities will serve.

Hence, proposals by States for a median installation under these circumstances, if considered justified, may be approved by Division Administrators as an exception to the State's approved utility accommodation policy under the provisions of § 645.215(d).

Access To Utility Facilities (Including Gates)

If a State allows utility facilities to longitudinally occupy freeway right-of-way within the access control lines, its utility accommodation policy must address access to construct, operate and maintain these facilities. The nature and extent of the access, including possible direct access from through roadways or ramps if allowed, and conditions for controlling and policing access should be covered in the State's policy. The State's policy on access should demonstrate that the State has taken adequate steps to ensure the permitted utility use, including access to construct, operate and maintain the utility facilities, can be accomplished in a manner that will not adversely affect the safety of the freeway.

The FHWA's approval of a State's utility accommodation policy is viewed as representing FHWA acceptance of the State's freeway access approval and control process (this could include locked gates, direct access from through roadways, etc.) as covered in the State's policy. No further submittal to FHWA on these matters would be necessary except in those instances where the proposed access is not in accord with the State's approved policy. In these cases, FHWA action on exceptions involving access can be handled under the provisions of 23 CFR 645.215(d) similar to other exceptions to a State's policy.

If a utility wants to make use of gates for access to its facilities, the following conditions are typically used in this situation:

- Access to and from the freeway will be on the basis of a revocable permit.
- The gates must be locked when not in use and can only be used by authorized utility personnel.
- Use must not adversely affect traffic operations;
- Use will not give the utility a claim to permanent access rights.

Uniform Policies and Procedures

Section 645.209(d) requires State transportation departments to control utility use of Federal-aid highway right-of-way within the State and its political subdivisions. This is to be done by exercising, or causing to be exercised, adequate regulation over such use and occupancy through the establishment and enforcement of reasonably uniform policies and procedures for utility accommodation.

The term "highway" is defined in § 645.207 to mean any public way for vehicular travel constructed or improved in whole or part with Federal-aid highway funds. Hence, there is a distinction between highways actually constructed or improved using Federal-aid highway funds, and highways eligible for construction or improvement with Federal-aid highway funds.

Even though States may only be required to regulate utility use on highways where Federal-aid highway funds have been used, as a practical matter it is difficult for them to adopt one policy

for Federally funded highways versus a different policy for adjoining State funded highways. As a result, States normally adopt a utility accommodation policy that covers highway routes under their jurisdiction as a group.

Utility Use Where State Lacks Authority

Under § 645.209(g), for Federal-aid projects on highways where the State cannot exercise authority to control utility use of the highway right-of-way, the State is required to make adequate arrangements to ensure that utility use of the highway right-of-way is properly controlled. Typically this situation arises on roads off the State's system, such as those under county or city jurisdiction; however, it can also occur for roads that may be under the jurisdiction of another State level entity such as a toll road authority. In these situations, the local or toll road authorities have the option of developing their own utility accommodation policies but this is rarely done. Rather, the approach used is that the State/local or State/toll road agreement for the Federal-aid highway project will make reference to the State's utility accommodation policy and its application to the local or toll road project.

This is one area of utility accommodation that requires continued attention. If a State's utility accommodation policy will, in effect, serve as the document controlling utility use of right-of-way on highways under the jurisdiction of others, particularly on local Federal-aid projects, it is important that the State's policy include provisions to adequately address utility use on these types of roadway facilities. It is also important that these other highway authorities are not only aware that the State's policy is being used, but are familiar with the requirements to be applied.

Scenic Areas

Section 645.209(h) maintains the same basic philosophy of not permitting the installation of utilities on highways within or adjacent to scenic areas except under special conditions. However, the method of administering this requirement was revised in 1985.

Under former PPM 30-4, if utility use was to be allowed in scenic areas under special conditions, the State was required to clear this matter through the Division Administrator. Sections 645.209(h) and 645.211(c)(3) change this process. Now the State is allowed to address the scenic areas issue, including special conditions under which exceptions will be allowed, within its utility accommodation policy. Thus, FHWA's acceptance of the State's utility accommodation policy should eliminate the need for clearance of individual exceptions through the Division Office.

Additionally, under former PPM 30-4.1, a mechanism was established for so-called hardship cases involving scenic areas. This process required a submittal to the Federal Highway Administrator, but none were ever made. As a consequence, when 23 CFR 645 was issued in 1985, this hardship procedure was not included. Should a need arise in the future to process a hardship type request involving scenic areas, it could be handled under 23 CFR 645.215(d) as a situation not in accordance with the State's approved policy. The FHWA's decisions on the matter can be made at the Division Office level.

Traffic Control Plan

This provision was included in 23 CFR 645 to highlight the importance of having proper traffic control within utility work areas. It is not a new requirement since 23 CFR 630 subpart J, Traffic Safety in Highway and Street Work Zones, has been in place many years and covers utility construction and maintenance work activities on Federal-aid projects.

Under § 645.209(j) it is intended that the transportation department maintain control over the process of providing proper traffic control devices in work zones. Designation of who is to prepare a traffic control plan and who is to provide the necessary traffic control devices is to be determined by the transportation department under the its own established procedures.

Corrective Measures/Utility Pole Safety Programs

Section 645.209(k), reads as follows:

When the transportation department determines that existing utility facilities are likely to be associated with injury or accident to the highway user ... the highway agency shall initiate ... in consultation with the affected utilities, corrective measures ...

The intent of this regulation is for each State to work with pole owners to develop and implement programs to systematically remove, relocate, or mitigate hazardously-located utility poles in a reasonable, cost-effective manner.

A utility pole crash reduction program as envisioned in the Federal regulations should contain the following essential elements:

- Identification of hazardously-located utility poles.
- Analysis of hazardously-located poles and development of countermeasures,
- Establishment of a goal for removing, relocating, or mitigating hazardously-located utility poles.
- Actual removal, relocation, or mitigation of hazardously-located utility poles.

Ideally, the clear zone should be free of utility poles. Where poles exist in the clear zone, or where an analysis has shown that an existing pole located outside the clear zone may need treatment, many options are available. The following list has generally been considered as the desirable order of treatment:

- Remove the pole and underground the utility lines;
- Relocate the pole to a location where it is less likely to be struck;
- Reduce the number of poles by joint use, placing poles on only one side of the street, or increasing pole spacing by using bigger, taller poles;
- Reduce impact severity by using breakaway utility poles;
- Redirect a vehicle by shielding the pole with a longitudinal traffic barrier or crash cushion; and
- Warn of the presence of the pole if the alternatives above are not appropriate using warning signs, reflective paint, sheeting, or object markers placed on the poles.

There is also the possibility that keeping the driver on the road is the best solution to a crash problem. This may be done by positive guidance. For example, using pavement markings, delineators, advance warning signs, and other visual cues to tell the driver what to expect and to provide a visual path through a site. Physical enhancements such as improving the skid resistance of the pavement, widening the pavement travel lanes, widening or paving shoulders, placing rumble strips on the shoulders, improving the superelevation, straightening sharp

curves, decreasing the speed of vehicles, or adding lighting in areas where crashes frequently occur at night, may also diminish crash potential by decreasing the number of vehicles that for whatever reason leave the travelway.

Once specific corrective actions have been determined, it is expected implementation will be pursued through a prioritization process which takes into account resources available, replacement and upgrading planned both for the utility and highway physical plants, and overall accident potential.

To be effective this corrective program must be a joint effort between highway authorities and the affected utilities. It is strongly encouraged that the utility companies work closely with the transportation departments in identifying problem areas and establishing schedules for corrective actions. Such schedules should take into consideration, wherever possible, a utility's planned activities on line upgrades, replacements, and the like. An orderly, planned, effective process of safety improvements over time that would take into consideration the costs to both the highway user and utility consumer is preferred.

The Washington State Department of Transportation (WSDOT) has a model utility pole safety program. It was developed and implemented in coordination with the affected utility pole owners. The Division Office provided invaluable encouragement and assistance. WSDOT considers the most hazardously-located utility poles to be those that are: (a) outside of horizontal curves where advisory signed speeds for the curve are 15 mph or more below the posted speed limit of that section of highway; (b) within the turn radius of public at-grade intersections; (c) where a barrier, embankment, rock outcropping, ditch, or other roadside feature is likely to direct a vehicle into a utility object; or (d) closer than 5-feet horizontal beyond the edge of the usable shoulder. A goal has been established for removing, relocating, or mitigating a certain number of hazardously-located utility poles each year. This goal applies to each company owning utility poles and takes into account the size of the utility company, the number of poles in need of attention, available funding, and other factors. Hazardously-located utility poles may be removed, relocated, or mitigated in conjunction with planned highway or utility projects or individually. All utility poles removed, relocated, or mitigated, for whatever reason, count toward the utility company's goal. Efforts are made to systematically address the worst poles first.

Since most hazardously-located utility poles are on highway right-of-way, State law in most States requires the owner of the poles to pay for removal, relocation, or mitigation. If, however, the State can pay and does pay, Federal funds can participate in the cost, even up to 100 percent in some cases.

A strong case can be made for moving utility poles if they are located so as to present a significantly greater threat to motorists than anything else along the road. But, if they are not, States should not ask the utility pole owners to do any more to improve roadside safety than they plan to do themselves.

Questions can arise as to the amount of corrective actions regarding utility facilities that should be undertaken as part of 3R (resurfacing, restoration, rehabilitation) projects. Overall, the FHWA has encouraged and supported efforts by each State to develop and implement reasonable and effective clear zone policies consistent with the principles set forth in the AASHTO Green Book (see above discussion of "New Above Ground Installations/ Clear Zone Policies").

In this respect a number of States have adopted individual 3R project design criteria that specifically addresses the clear zone issue. Considerable judgment must be exercised in

actually establishing clear roadside areas on individual 3R projects to ensure that the safety benefits are reasonably commensurate with costs. Consideration should be given to this matter regardless of who pays for the utility work.

As clarified by FHWA's July 1988 final rule, which modified 23 CFR 645.107, costs incurred by transportation departments in implementing projects for safety corrective measures to reduce the hazards of utilities to highway users are eligible for Federal-aid participation.

Wetlands

There has been concern that FHWA's utility regulations might be used by some as a basis for authority for allowing placement within highway right-of-way of structures or facilities to drain adjacent wetlands. Section 645.209(l) was specifically added to address this issue. The section clearly states that the installation of private lines on the right-of-way of Federal-aid or direct Federal highway projects to drain adjacent wetlands is inconsistent with Executive Order 11990, Protection of Wetlands, and is to be prohibited.

Utility Determination

The 2000 amendments added paragraph (m) to 23 CFR 645.209 to emphasize that in determining whether a proposed installation is a utility or not, the most important consideration is how the State views it under its own State laws and/or regulations.

This determination is important because utilities are accommodated under the utility regulations; whereas, private lines and other non-utilities are accommodated under other regulations. As in many utility-related matters, the FHWA definition of "utility facilities" is broad enough to cover most situations, but nonetheless, in States where the State definition is more restrictive, or sometimes more liberal, than the FHWA definition, the FHWA will normally look upon it in the same manner the State does.

STATE UTILITY ACCOMMODATION POLICIES (23 CFR 645.211)

Overall Process

FHWA's historic approach to handling utility use of the right-of-way of Federal-aid and direct Federal projects has been maintained in 23 CFR 645 subpart B. This regulation requires each State to develop its own utility accommodation policy setting forth the manner in which the State will control the use of Federal-aid highway right-of-way by utility facilities. In 1988 this concept was expanded to also include longitudinal utility use of freeway right-of-way.

Once the State's policy is approved by the FHWA, any utility installations proposed to be installed on Federal-aid highway projects in accordance with the approved State policy may be approved by the State without referral to the FHWA. FHWA approval of proposed utility installations is limited to those which are not in accordance with the approved State policy.

Criteria

The FHWA uses two AASHTO publications -- *A Guide for Accommodating Utilities Within Highway Right-of-Way* and *Roadside Design Guide* -- to assist in its review of individual State utility accommodation policies. This means these documents will serve as guidance for